

08/16/01
JCEP U.S. PTO

08-17-01

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Please type a plus sign (+) inside this box ☒ Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. 678-726 (P9926)

First Inventor Jae-Seung YOO

Title Antenna Array Apparatus and Beamforming ...

Express Mail Label No. EL 918828596 US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 35]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 10]
5. ☐ Oath or Declaration [Total Pages]
 - a. ☐ Newly executed (original or copy)
 - b. ☐ Copy from a prior application (37 CFR 1.63 (d))
(for continuation/divisional with Box 18 completed)
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement of Power of Attorney (when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 [Copies of IDS Citations]
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☐ Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: _____
Prior application information: Examiner: _____ Group Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☐ Customer Number or Bar Code Label [] or ☒ Correspondence address below
(Insert Customer No. or Attach bar code label here)

Name	Paul J. Farrell, Esq.				
Address	DILWORTH & BARRESE, LLP				
	333 Earle Ovington Blvd.				
City	Uniondale	State	New York	Zip Code	11553
Country	U.S.A	Telephone	(516) 228-8484	Fax	(516) 228-8516

Name (Print/Type)	Paul J. Farrell	Registration No. (Attorney/Agent)	33,494
Signature		Date	August 16, 2001

CERTIFICATION UNDER 37 C.F.R. § 1.10

I hereby certify that this correspondence and the documents referred to as enclosed are being deposited with the United States Postal Service on date below in an envelope as "Express Mail Post Office to Addressee" Mail Label Number EL 918828596 US, addressed to: Assistant Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

Dated: August 16, 2001

Michael J. Porco

09/16/01
J1000 U.S. PTO
08/16/01

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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

(\$ 1,110.00

Complete if Known

Application Number	Not yet assigned
Filing Date	August 16, 2001
First Named Inventor	Jae-Seung YOO
Examiner Name	
Group Art Unit	Not yet assigned
Attorney Docket No.	678-726 (P9926)

METHOD OF PAYMENT (check one)

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number: 04-1121
Deposit Account Name: DILWORTH & BARRESE, LLP

☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☒ Payment Enclosed:

☒ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Code	Small Entity Code	Fee Description	Fee Paid
101	710	201 355 Utility filing fee	\$710.00
106	320	206 160 Design filing fee	
107	490	207 245 Plant filing fee	
108	710	208 355 Reissue filing fee	
114	150	214 75 Provisional filing fee	
SUBTOTAL (1)			(\$ 710.00

2. EXTRA CLAIM FEES

Total Claims: 13
Independent Claims: 8
Multiple Dependent Claims: 5

Extra Claims Fee from below: 0
Fee Paid: \$0

20** = 0 x 18 = \$0
3** = 5 x 80 = \$400
270 = 0

**or number previously paid, if greater; For Reissues, see below

Large Entity Code	Small Entity Code	Fee Description
103	18	203 9' Claims in excess of 20
102	80	202 40 Independent claims in excess of 3
104	270	204 135 Multiple dependent claim, if not paid
109	80	209 40 ** Reissue independent claims over original patent
110	18	210 9 ** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 400.00

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Code	Small Entity Code	Fee Description	Fee Paid
105	130	205 65 Surcharge - late filing fee or oath	
127	50	227 25 Surcharge - late provisional filing fee or cover sheet	
139	130	139 130 Non-English specification	
147	2,520	147 2,520 For filing a request for ex parte reexamination	
112	920*	112 920* Requesting publication of SIR prior to Examiner action	
113	1,840*	113 1,840* Requesting publication of SIR after Examiner action	
115	110	215 55 Extension for reply within first month	
116	390	216 195 Extension for reply within second month	
117	890	217 445 Extension for reply within third month	
118	1,390	218 695 Extension for reply within fourth month	
128	1,890	228 945 Extension for reply within fifth month	
119	310	219 155 Notice of Appeal	
120	310	220 155 Filing a brief in support of an appeal	
121	270	221 135 Request for oral hearing	
138	1,510	138 1,510 Petition to institute a public use proceeding	
140	110	240 55 Petition to revive - unavoidable	
141	1,240	241 620 Petition to revive - unintentional	
142	1,240	242 620 Utility issue fee (or reissue)	
143	440	243 220 Design issue fee	
144	600	244 300 Plant issue fee	
122	130	122 130 Petitions to the Commissioner	
123	50	123 50 Processing fee under 37 CFR 1.17(c)	
126	240	126 240 Submission of Information Disclosure Stmt	
581	40	581 40 Recording each patent assignment per property (times number of properties)	
146	710	246 355 Filing a submission after final rejection (37 CFR § 1.129(a))	
149	710	249 355 For each additional invention to be examined (37 CFR § 1.129(b))	
179	710	279 355 Request for Continued Examination (RCE)	
169	900	169 900 Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid.

SUBTOTAL (3) (\$ 0.00

SUBMITTED BY

Name (Print/Type)	Paul J. Farrell	Registration No. (Attorney/Agent)	33,494	Telephone	(516) 228-8484
Signature		Date	August 16, 2001		

CERTIFICATION UNDER 37 C.F.R. § 1.10

I hereby certify that this correspondence and the documents referred to as enclosed are being deposited with the United States Postal Service on date below in an envelope as "Express Mail Post Office to Addressee" Mail Label Number EL 918828596 US addressed to: Assistant Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

Dated: August 16,, 2001

Michael J. Porco

PATENT

Atty. Docket No. 678-726 (P9926)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents
Washington, D.C. 20231

UTILITY APPLICATION DATA SHEET UNDER 37 C.F.R. § 1.76

Sir:

Transmitted herewith for filing is the patent application of

Inventor(s): Jae-Seung YOO, Kyong-Joon CHUN and Byung-Jin CHUN

For: ANTENNA ARRAY APPARATUS AND BEAMFORMING METHOD
USING GPS SIGNAL FOR BASE STATION IN MOBILE
TELECOMMUNICATION SYSTEM

Enclosed are:

- [X] 27 page(s) of specification
[X] 1 page(s) of Abstract
[X] 7 page(s) of claims
[X] 10 sheets of drawings [X] formal ☐ informal
[X] _____ page(s) of Declaration and Power of Attorney

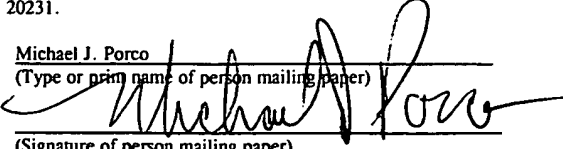
ASSIGNEE NAME: SAMSUNG ELECTRONICS CO., LTD.

ASSIGNEE RESIDENCE: KYUNGKI-DO, KOREA

CERTIFICATION UNDER 37 C.F.R. § 1.10

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date August 16, 2001 in an envelope as "Express Mail Post Office to Addressee" Mail Label Number EL 918828596US addressed to: Attn: Box Patent Application, Commissioner for Patents, Washington, D.C. 20231.

Michael J. Porco
(Type or print name of person mailing paper)


(Signature of person mailing paper)

09931129-001601

[] This application claims the benefit under 35 U.S.C. §119(e) of U.S. Provisional Application(s) No(s).:

APPLICATION NO(S).:

FILING DATE

____/____/____
____/____/____

[X] Certified copy of applications

Country

Appln. No.

Filed

KOREA

47256/2000

August 16, 2000

from which priority under Title 35 United States Code, § 119 is claimed
[] is enclosed.

[X] will follow.

CALCULATION OF UTILITY APPLICATION FEE

For	Number Filed	Number Extra	Rate	Basic Fee \$710.00
TOTAL CLAIMS	13	0	x 18 =	\$ 0.00
INDEPENDENT CLAIMS	8	5	x 80 =	\$ 400.00
[] Multiple Dep. Claim	0		\$270	\$ 0.00
			TOTAL	\$ 1,110.00

[] The amount of \$40.00 for recording the attached Assignment is enclosed as a separate check.

[X] A check in the amount of \$ 1,110.00 to cover the [X] filing fee(s) is enclosed.

[] Charge fee to Deposit Account No. 04-1121. Order No. _____
TWO (2) COPIES OF THIS SHEET ARE ENCLOSED.

0001129-034601

[X] Please charge any deficiency as well as any other fee(s) which may become due under 37 C.F.R. § 1.16 and 1.17, at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account No. 04-1121. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. 04-1121 therefor. TWO (2) COPIES OF THIS SHEET ARE ENCLOSED.

Date: August 16, 2001



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Reg. No. 33,494

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Fax. (516) 228-8516

*Includes all independent and single dependent claims and all claims referred to in multiple claims. See 37 C.F.R. § 1.75(c).

1092129-034601